Ecotourism and Sustainable Development in Costa Rica

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Abstract

The purpose of this paper is to provide a synopsis of the current issues facing ecotourism in Costa Rica; critically examine the impacts and challenges of ecotourism; analyze the potential of ecotourism as a strategy for sustainable development; look at ways in which ecotourism and sustainable development can be evaluated; and suggest ways to improve current ecotourism practices and policies for Costa Rica. What are the impacts and challenges of ecotourism? What are the possible benefits that ecotourism can bring? Is ecotourism in Costa Rica sustainable?

Based on the guiding principles of ecotourism, a legitimate argument can be made that ecotourism in Costa Rica has not produced desired outcomes and is not sustainable. However, an equally strong argument can be made that although ecotourism may not currently be sustainable, it has yet to fully mature, and has shown signs that it can achieve a balance between development and conservation goals. Ecotourism has more promise for achieving sustainability than alternative types of land use such as agriculture, cattle grazing, logging, or mass tourism. Whether or not ecotourism in Costa Rica will prove to be sustainable in the long-term remains to be seen. In order to increase the likelihood that ecotourism achieves goals of sustainable development in Costa Rica, all of the key actors must to begin to take more proactive measures in order to ensure that ecotourism is carefully planned and implemented. Ecotourism must account for social, economic and environmental implications, in order to succeed. A much more balanced and integrated approach, founded on the guiding principles of sustainable development, is essential to maximize the benefits and minimize the negative impacts of ecotourism in Costa Rica.

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Chapter 1 – Introduction

Ecotourism is often perceived as an excellent tool for promoting sustainable development in developing countries. Many view ecotourism as a viable way to protect the natural environment and create social and economic benefits for local communities. According to David Weaver "Interest in ecotourism, now widespread among tourism planners and marketers, is rationalized by a number of popular assumptions regarding the sector's potential economic, environmental, and socio-cultural benefits" (Weaver, 1999, 795). While some ecotourism projects can support such claims, many ecotourism projects have failed to address some fundamental issues and do not generate the very benefits ecotourism is intended to provide. When poorly planned and implemented, ecotourism can quickly turn economic gains into social and environmental disasters. Regardless of the fact ecotourism is not being properly planned and implemented in many instances; it has continued to gain popularity over the past two decades and has developed into a worldwide phenomenon that shows no signs of slowing down. Ecotourism is currently the fastest growing sector of the global tourism industry (Roberts and Thanos, 2003; Place 1998). Most estimates indicate that the demand for ecotourism is growing at an annual rate of 10 to 30 percent (Honey, 1999). Now that ecotourism has reached such stature, it is especially important to scrutinize its effectiveness as a strategy for sustainable development, and search for ways to improve policies and practices. Clearly ecotourism is not a universal remedy; but its potential to promote sustainable development deserves considerable attention.

As ecotourism has grown and evolved over the past two decades, so has our understanding of it. While the concept remains incredibly complex and surrounded by

uncertainty, there is a solid foundation of literature, which provides a great deal of insight and perspective on the multitude of issues and questions surrounding the concept. Several experts have examined the phenomena of ecotourism in great depth, as ecotourism has become an increasingly important topic of debate in the discourse of international development. Although the foundation of data is strong, there remains a great deal of uncertainty and debate, which requires more exploration as to what ecotourism really means and what its role is in the context of international development. The literature on ecotourism ranges from extreme skepticism to hopeful optimism, which has been fueling the debate over its value as a development strategy. Although many questions and issues associated with ecotourism will continue to be debated, a consensus on the guiding principles of ecotourism have become apparent and many countries' development strategies have pushed ecotourism to the forefront of their policy agenda based on the belief that it can be a way of achieving sustainable development.

The purpose of this paper is to provide a synopsis of the current issues facing ecotourism in Costa Rica; critically examine the impacts and challenges of ecotourism; analyze the potential of ecotourism as a strategy for sustainable development; look at ways in which ecotourism and sustainable development can be evaluated; and suggest ways to improve current ecotourism practices and policies for Costa Rica. What are the impacts and challenges of ecotourism? What are the possible benefits that ecotourism can bring? Is ecotourism in Costa Rica sustainable?

Based on the guiding principles of ecotourism, a legitimate argument can be made that ecotourism in Costa Rica has not produced desired outcomes and is not sustainable. However, an equally strong argument can be made that although ecotourism may not

currently be sustainable, it has yet to fully mature, and has shown signs that it can achieve a balance between development and conservation goals. Ecotourism has more promise for achieving sustainability than alternative types of land use such as agriculture, cattle grazing, logging, or mass tourism. Whether or not ecotourism in Costa Rica will prove to be sustainable in the long-term remains to be seen. In order to increase the likelihood that ecotourism achieves goals of sustainable development in Costa Rica, all of the key actors must to begin to take more proactive measures in order to ensure that ecotourism is carefully planned and implemented. Ecotourism must account for social, economic and environmental implications, in order to succeed. A much more balanced and integrated approach, founded on the guiding principles of sustainable development, is essential to maximize the benefits and minimize the negative impacts of ecotourism in Costa Rica.

Chapter 2 – Ecotourism and Sustainable Development

1. What is Ecotourism?

Although the origins of the concept of ecotourism are not certain, one of the first sources to have contributed to the discourse appears to be Hetzer (1965), who identified four pillars or principles of responsible tourism. These four pillars are minimizing environmental impacts, respecting host cultures, maximizing benefits to local people, and maximizing tourist satisfaction (Blamey, 2001). In 1978 Kenton Miller also wrote about similar principles associated with ecotourism when he wrote about national park planning in Latin America. Although Miller referred to the concept as "ecodevelopment" he clearly described the basic theoretical concept of ecotourism by describing the need for park development to integrate social, economic, and environmental considerations in order to meet the needs of both humans and the environment. Kenton's concepts of ecodevelopment also became part of the debate on sustainable development (Honey, 1999).

Some experts suggest that there were two major components that contributed to the emergence of ecotourism. First, ecotourism is linked to the environmental movement of the 1970's and 1980's. Second, there was a great dissatisfaction with mass tourism due to overdevelopment, environmental pollution, and the invasion of culturally insensitive and economically disruptive foreigners (Honey, 1999; Orams, 1995). This combination of an increase in environmental awareness and the emerging dissatisfaction with mass tourism led to an increased demand for ecotourism (Blamey, 2001).

Currently there is no clear-cut consensus on the definition of ecotourism. The meaning and the use of the term are plagued by disagreements, confusion, and

propaganda (Weaver, 1999). Many argue that the lack of a clear definition and the vagaries and ambiguities that surround the term ecotourism, make it almost meaningless (Weaver 2001). According to tour operator Kurt Kutay, "Ecotourism is now used indiscriminately to describe anything related to nature or unrelated to conventional tourism" (Honey 1999, p. 21). Others argue that there are different types of ecotourism: such has "hard" vs. "soft", "deep" vs. "shallow", or "active" versus "passive" ecotourism (Stem, Lassole, Lee, and Deshler, 2003; Orams, 1995). Therefore, it can be argued that because there are different types of ecotourism, it cannot be grouped into one categorical definition. Even though ecotourism lacks a concrete definition, there are many well-recognized definitions that have formed a clear picture of its core principles, which are shown in Table 1.

Table 1. Definitions of Ecotourism

Source	Definition						
Conservation	A form of tourism inspired primarily by the natural history of an area,						
International	including its indigenous cultures. The ecotourist visits relatively						
(Ziffer, 1989).	undeveloped areas in the spirit of appreciation, participation and						
	sensitivity. The ecotourist practices a non-consumptive use of wildlife						
	and natural resources and contributes to the visited areas through labor						
	or financial means aimed at directly benefiting the conservation of the						
	site and the economic well-being of the local residents.						
World	Environmentally responsible travel and visitation to relatively						
Conservation	undisturbed natural areas, in order to enjoy and appreciate nature that						
Union (Brandon,	promotes conservation, has low negative visitor impact, and provides						
1996)	for beneficially active socio-economic involvement of local						
	populations.						
Martha Honey	Travel to fragile, pristine, and usually protected areas that strive to be						
(Honey, 1999,	low impact and (usually) small scale. It helps educate the traveler;						
25).	provides funds for conservation; directly benefits the economic						
	development and political empowerment of local communities; and						
	fosters respect for different cultures and for human rights.						
International	Responsible travel to natural areas that conserves the environment and						
Ecotourism	sustains the well-being of local people.						
Society (2004)							

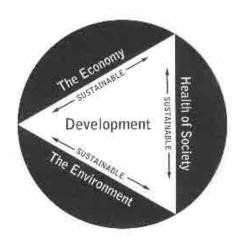
While there are a variety of definitions, each with a unique perspective, there is considerable consensus that ecotourism must be beneficial to local communities and have a positive effect on protecting the environment. Ecotourism is still in its infancy as a global phenomena but as David Weaver points out, "some degree of consensus or cohesion may be emerging: indicators, perhaps, that ecotourism is moving towards a higher level of maturity" (Weaver, 2001, p.1). As the term ecotourism has evolved, definitions have become more precise, with stronger ties to principles of sustainable development (Blamey, 2001). Ecotourism's perceived potential as an effective tool for sustainable development is the main reason why developing countries are now embracing it and including it in their economic development and conservation strategies (Stem et al., 2003).

2. What is Sustainable Development?

Sustainable development is a concept that has been at the forefront of international development. The underlying principles that make up sustainable development have been around for centuries but it was not until 1987 that official use of the term "sustainable development" received international recognition. In 1987, the Bruntland Commission's basic definition of sustainable development was "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Our Common Future, 1987, p. 43). Since the first definition of sustainable development by the Bruntland Commission in 1987, the concept has continued to gain popularity and has evolved to represent much more than it's original definition. Sustainable development can mean many different, depending on the context in which it is being applied. In the context of international development, sustainable

development is now commonly understood in terms of the complex interrelation between social, economic, and environmental aspects of development. Despite the criticism aimed at sustainable development, its principles are still very useful as a tool for planning and policy-making (Sirakaya, Jamal, and Choi, 2001).

Figure 1: Sustainable Development Triangle (World Conservation Union, 2003)



Although sustainable development may be an abstract concept, the sustainable development triangle provides a simple conceptual framework. As shown in figure 1, sustainable development aims to provide a balance between the economy, the environment and society. The triangle stresses the idea that all sides are interdependent and must coexist in order to promote successful long-term development. Essentially, ecotourism can work as a

form of sustainable development if it is includes all three areas of the sustainable development triangle and brings benefits to current and future generations.

3. Ecotourism and Sustainable Development

Interestingly, the most cited document on sustainable development, <u>Our Common Future</u>, does not mention tourism at all (Wall, 1997; Wearing, 2001). However, it is not hard to see the considerable overlap between the core principles of ecotourism and sustainable development. The relationship between the two has become so intertwined, that they should no longer be thought of as separate philosophies. Some mention of sustainability can be found in almost every single piece of literature on ecotourism whether it is economic, social, environmental, or all three combined.

The concept of *sustainable tourism*, which has existed for decades, encompasses mass tourism as well as ecotourism (Blamey, 2001). In many ways, sustainable tourism exemplifies the relationship between ecotourism and sustainable development. Many groups have proposed sets of guidelines or principles for sustainable tourism and ecotourism. Tourism Concern and the World Wildlife Fund for Nature developed a well-known list of principles and guidelines in 1991, which are presented in Table 2.

Table 2. Principles for Sustainable Tourism (Blamey, 2001)

1. Using resources	The conservation and sustainable use of resources natural,				
S	, ,				
sustainably	social, cultural, is crucial and makes long-term business				
	sense				
2. Reducing over	Reduction of over-consumption and waste avoids the costs				
consumption and waste	of restoring long-term environmental damage and				
	contributes to the quality of tourism				
3. Maintaining	Maintaining and promoting natural, social, and cultural				
Biodiversity	diversity is essential for long-term sustainable tourism, and				
	creates a resilient base for the industry				
4. Integrating tourism	Tourism development which is integrated into a national and				
into planning	local strategic planning framework and which undertakes				
	environmental impact assessments, increase the long-term				
	viability of tourism				
5. Supporting local	Tourism that supports a wide range of local economic				
economies	activities and which takes environmental costs and values				
	into account, both protects these economies and avoids				
	environmental damage				
6. Involving local	The full involvement of local communities in the tourism				
communities	sector not only benefits them and the environment but also				
	improves the quality of the tourism project				
7. Consulting	Consultation between the tourism industry and local				
stakeholders and the	communities organizations and institutions is essential if				
public	they are to work alongside each other and resolve potential				
P	conflicts of interest				
8. Training Staff	Staff training which integrates sustainable tourism into work				
or raming and	practices, along with recruitment of personnel at all levels,				
	improves the quality of the tourism product				
9. Marketing tourism	Marketing that provides tourists with full and responsible				
responsibly	information increases respect for the natural, social and				
Caponaidiy	cultural environments of destination areas and enhances				
	customer satisfaction				
	CUSTOTIICI Satistaction				

10. Undertaking	Ongoing research and monitoring by the industry using				
research	effective data collection and analysis is essential to help				
	solve problems and bring benefits to destinations, the				
	industry and consumers				

When carefully examining these sets of goals or principles, one can clearly see the emphasis on sustainable development. In 1995, the World Trade Organization (WTO) stated the meaning of sustainable tourism in Agenda 21 for the Travel and Tourism industry: "Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems" (Sirakaya et al., 2001, p. 412).

Ecotourism, in its purest form, is founded on the same philosophy as sustainable development as well as sustainable tourism. It is important to think of sustainability not only as a goal for ecotourism but perhaps more importantly as the means for achieving that goal. Since sustainability is so difficult to measure, it is more important to emphasize sustainability as the intention and not necessarily the outcome. The most important way to advance ecotourism is to adhere to the philosophy of sustainable development and to try to maximize the probability of positive impacts while minimizing the negative impacts (Weaver, 1999).

In Costa Rica, ecotourism has had mixed results as a strategy for sustainable development. There have been encouraging benefits as well as detrimental consequences (Stem et al., 2003). Because ecotourism in Costa Rica has reached such a high level of maturity compared to other countries, it now serves as an example for both the potential and the pitfalls of ecotourism and provides lessons on how it can be planned and

implemented in other parts of the world. Many countries such as Belize and Panama are now looking to Costa Rica as a model for their own ecotourism development strategies (Blamey, 2001). But is this a good idea? According to Weaver and Schluter (2001), there are grounds for contesting Costa Rica's reputation as an ecotourism exemplar. The following chapters examine the economic, social and environmental impacts and challenges of ecotourism, in order to provide a comprehensive and balanced analysis of its contribution to sustainable development in Costa Rica.

<u>Chapter 3 – The Growth of Ecotourism in Costa Rica</u>

Costa Rica is one of several countries in the world that has been embracing ecotourism as a national conservation and development strategy (Stem et al., 2003). Costa Rica is unique due to the magnitude of its ecotourism industry and its maturity when compared to other developing countries. Over the years, Costa Rica has earned a



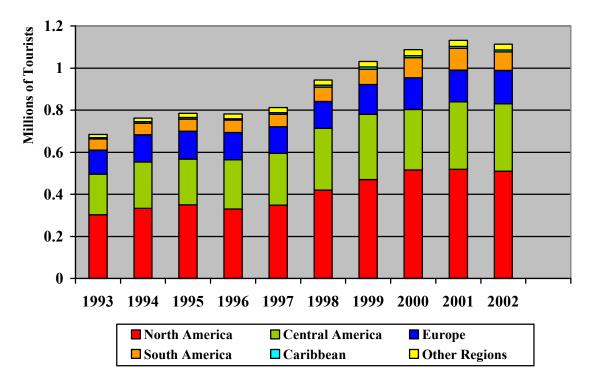
reputation as the premier ecotourism destination in the world and is considered ecotourism's poster child (Honey, 1999).

The main reason Costa Rica has become such a popular destination for ecotourism is because it has all of the right ingredients. Costa Rica has excellent national parks, a stable democratic government with no army, a pleasant climate, and friendly people. It also has one of the highest standards of living, the largest middle class, the best public health care system, the best public education through the University level, and the highest literacy rate in Latin America (Honey, 1999). Costa Rica's infrastructure is also very good compared to most developing countries in terms of paved roads, telephones, and electricity. It has an international airport with flights only a few hours from the United States (Honey, 1999; Weaver, 1998).

While all these aspects are important, the most important ingredient for successful ecotourism is nature, which is the key attraction for tourists. In a 1990 survey of US-based tourists, 39% identified nature-based attractions as their primary reason for visiting Costa Rica (Weaver, 1999). Costa Rica is blessed with an abundance of natural resources such as beaches, mangroves, mountains, caves, waterfalls, volcanoes, and tropical rainforests. The tropical rainforests make Costa Rica one of the most biologically diverse areas of the world, containing 5% of the entire planet's biodiversity in a country the size of West Virginia (Honey, 1999).

The transformation of the Costa Rican tourism industry is one of impressive scale. Ecotourism has been steadily increasing in Costa Rica since the 1970's and really began to take off in the 1980's when tourism garnered tremendous support from the government and assistance from USAID, the World Bank, and the IMF. "In the 1980s, the government began for the first time to invest seriously in tourism, reorganizing and beefing up funding for the country's tourism board, the Costa Rican Tourism Board (ITC)" (Honey, 1999, p. 133). The government of Costa Rica began to invest heavily in ecotourism, and in 1984 they passed an important piece of legislation, which gave incentives and tax breaks to hotels, airlines, car rental agencies, travel agencies, and sea transportation (Honey, 1999).





Tourism earnings surpassed coffee in 1990 and then bananas in 1993, becoming the number one foreign exchange earner and creating a more diverse economy (Minca and Linda, 2000). The percentage of ecotourists represented in these statistics varies depending on how ecotourists are defined. In terms of active ecotourism, the numbers are relatively few. "With respect to the tourism sector, ecolodge-type facilities, despite their high profile, actually only account for a miniscule portion of all accommodations" (Weaver and Schluter, 2001). However, when considering passive ecotourists, tourist who may only visit one national park, the numbers are more significant. Tourism continued to explode throughout the 1990's. From 1994 to 1998, under President José María Figueres, Costa Rica offered a variety of incentives to tourism investors and launched a \$15 million publicity campaign to U.S. and Canadian ecotourists. The

government also passed a law that made environmental impact studies mandatory for tourism projects (Honey, 1999).

While the steady increase in numbers may appear to indicate success, there have been several consequences from such rapid growth. One of the biggest problems with the ecotourism industry growth is that it has been so heavily concentrated on foreign investment. Government supported policies and programs such as incentives and tax breaks for ecotourism in the 1990's were designed so that foreign investors would benefit the most. Local communities and small, locally owned businesses could not qualify for government incentives because they were too small and could not afford environmental impact statements and feasibility studies. These restrictions made it very difficult for smaller, locally owned businesses to get a piece of the pie. After a series of controversies over the government's role in attracting only very large foreign investors, the Cost Rica Tourism Board (ICT) modified its regulations to make it easier for local enterprises to qualify. However, many have argued that there is still not an even playing field (Honey, 1999).

The main government agency in charge of regulating tourism is the National Tourism Board, which is within the Ministry of Industry and Culture (Weaver, 1998). Overall, the Costa Rican government appears to be making some effort to improve policies and practices, but the Costa Rica Tourism Board (ICT) must find more ways to level the playing field between large foreign owned tourism and local micro enterprises. The ecotourism industry in Costa Rica has built an international reputation for ecotourism and built up incredible momentum over the past two decades, but it is yet to reach its full potential. As a whole, the country appears to be embracing it and looking for ways to

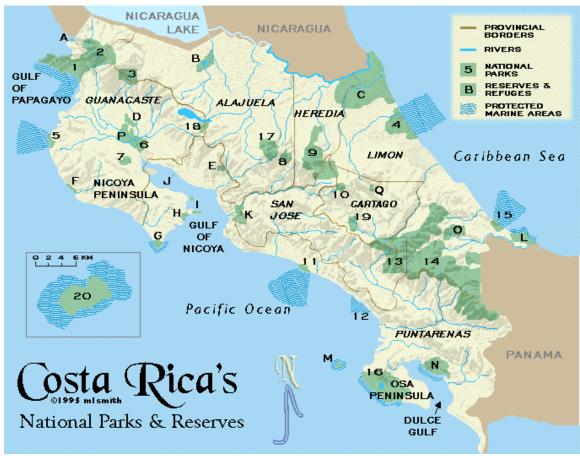
maximize its potential. There are many shortcomings that plague ecotourism in Costa Rica, which must be addressed, but Costa Rica is showing some signs that it may be heading in the right direction in search of the path to sustainability.

Chapter 4 – Environmental Impacts and Challenges

1. National Parks and Protected Areas

Costa Rica's national park system is the backbone of its ecotourism industry and an important contributor to the country's tourism industry as a whole. Costa Rica's first strictly protected area was established in 1963, and the first four national parks were officially created in 1970-1971 as a way to preserve Costa Rica's biodiversity (Weaver, 1998). Since then the national park system has expanded to include over 30 parks and reserves and more than 230 different protected areas (Honey, 1999).

The national parks and protected areas are home to many of the country's rich flora and fauna from a variety of ecosystems. Costa Rica has an estimated 850 bird species, 1260 tree species, 1200 orchid species, 270 species of mammals, 361 species of reptiles and amphibians, and more than 35,000 species of insects (Honey, 1999; Weaver, 1998). Estimates show that 25-28% of Costa Rica's land cover is protected in some way (Honey, 1999; Weaver, 1998). This is an impressive figure when considering the worldwide average is only 3% (Honey, 1999). Unfortunately the creation of parks and protected areas has not prevented the depletion of natural areas outside the system, which have become the victim of some of the fastest rates of deforestation in the world. (Minca and Linda, 2000).



(Smith, 1995)

	NATIONAL PARKS				RESERVES & REFUGES				
1	Santa Rosa		11	Manuel Antonio		A	Bolaños Island Refuge		J Pájaros Islands Reserve
2	Guanacaste		12	Ballena Marine		В	Caño Negro Refuge	-	K Carara Reserve
3	Rincón de la Vieja		13	Chirripó		C	Barra del Colorado Refuge		L Gandoca- Manzanillo Refuge
4	Tortuguero		14	La Amistad		D	Lomas Barbudal Reserve		Maño Island Reserve
5	Las Baulas de Guanacaste		15	Cahuita		E	Peñas Blancas Refuge		NGolfito Refuge
6	Palo Verde		16	Corcovado		F	Ostional Refuge		O ^{Hitoy-Cerere} Reserve
7	Barra Honda		1 /	Juan Castro Blanco		G	Cabo Blanco Absolute Reserve		Dr. Rafael Lucas Rodriguez
8	Poás Volcano		18	Arenal		Н	Curú Refuge		Caballero
9	Braulio Carrillo		19	Tapantí			Guayaha & Magritas		Refuge
10	Irazú Volcano	,	20	Cocos Island		I	Guayabo & Negritos Islands Reserve		QGuayabo National Monument

The national parks system has been a crucial part of the increase in tourism in Costa Rica and has been thoroughly integrated into the tourism industry. In 1991, one half of all international visitors spent atleast some time in the parks or protected areas. compared to 20% in 1983 (Epler Wood, 1993). "Between 1984 and 1988, the number of foreigners visiting parks more then doubled, and the number doubled again between 1988 and 1992" (Honey, 1999, 140). The national parks and protected areas are important to the tourism industry as a whole, but they are especially important to the ecotourism industry in particular. Throughout Costa Rica many ecotourism activities occur within communities that are either inside or adjacent to parks and protected areas. This means that the parks and protected areas are closely tied to the livelihoods of the people living near these areas. While parks and preserves perform important ecological functions by protecting biodiversity, watersheds, and soils, they can also represent the loss of critical resources to local inhabitants. The relationship between conservation efforts must not exclude people from the agenda and mixed uses of conservation areas should always be considered "If we succeed in "saving" an ecosystem but lose the people that are part of it, what have we really won?" (Roberts and Thanos, 2003, p. 83).

One of the major reasons that the national park service has not been as successful for the promotion of sustainable ecotourism development is that it has been operating on insufficient funding. "Between 1989 and 1992, economic problems in Costa Rica resulted in a 50% reduction in government funding for the national park system." (Epler Wood, 1993) Because the Costa Rican government has not properly funded the parks and protected areas, they have had to rely to a large extent on foreign donations and volunteer activity for their maintenance and management (Weaver and Schluter, 2001).

The government has made some efforts to improve the entire park management system, but they remain relatively neglected and lack funding even with reforms, which makes them more vulnerable to further disintegration (Weaver, 1999). Enduring economic problems, especially high levels of foreign debt, have crippled the national park system. Even as tourism earnings have continued to increase, Costa Rica is still struggling to fund its national park system (Roberts and Thanos, 2003).

2. Private Reserves

Private reserves have emerged as another important way to protect Costa Rica's natural resources and biodiversity. Their importance as an alternative to the national park system should be emphasized. According to a study of private reserves in Costa Rica in which sixty-eight reserve owners where studied, more than half of all reserves engage in ecotourism at some level (Langholz, Brandon, 2001). Private reserves such as La Selva, Rara Avis, and Monteverde Cloud Forest Preserve are all significant attractions and have been encouraged by the government as a way of augmenting the public system (Weaver, 1999). Private reserves have better potential due to the ability to use outside operators and engage in more sophisticated marketing (Langholz and Brandon, 2001).

Monteverde Cloud Forest Reserve, which is owned and managed by Tropical Science Center in San Jose, is the best-known and most heavily visited reserve in Costa Rica (Buckley, 2003). The reserve is famous for its important population of quetzal, an endangered bird species that is an icon of the regional culture and conservation efforts (Buckley, 2003). Monteverde currently receives about 50,000 visitors a year (Weaver, 1998). Tourist numbers grew from 450 in 1975 to 8,000 in 1985, to more than 50,000 in the late 1990's (Honey, 1999). Monteverde is considered by many to be a very

successful ecotourism destination. One of the keys to its success has been that 95% of all revenues from the park are used for operating expenses, an endowment fund, and scientific research (Buckley, 2003).

One private ecotourism reserve in Costa Rica, which is not named by Langholz and Brandon (2001) due to the sensitive nature of financial information, earned over US \$1.4 million. This amount would be even higher, but the owners decided to pay off the US \$1.2 million borrowed to purchase the land ahead of time. One of the keys to this reserve is that it provides a high quality experience at a high price (average of \$160 a night). By targeting the wealthy and providing luxury service in the middle of the jungle, the company has been able to maintain its financial viability while only having fourteen bungalows for accommodation. The high visitation numbers economic success of private reserves has, in many ways, legitimized ecotourism in Costa Rica. Private reserves should serve as a notice to the government that ecotourism has good earning potential and can be economically viable when sufficient resources are invested (Langholz and Brandon, 2001).

3. Carrying Capacity and Use impacts

One of the dangers of ecotourism is the excessive pressure it can add to environmentally sensitive areas. Ecotourism projects have a tendency to become overzealous and overcrowd natural areas with visitors, resulting in environmental degradation. "A major environmental cost is the possibility that local carrying capacities, difficult to gauge as they are because of their complexity, will be inadvertently exceeded in the long term by activity associated with ecotourism, especially in those cases where the sector is growing at a rapid rate" (Weaver, 1999, p. 796). Local carrying capacities

can be exceeded as a result of the negative impacts of ecotourism such as solid waste generation, pollution, habitat destruction, forest degradation, and trail erosion (Lindsey, 2003; Stem et al., 2003). These are some of the reasons that many question ecotourism's contribution to sustainable development. Ecotourism can further degrade fragile ecosystems and threaten the very resources upon which it depends. As Roberts and Thanos (2003) put it, places are being "preserved to death."

Ecotourism should emphasize minimizing negative effects through its emphasis on low-impact construction, controlled visitor numbers, and care in interacting with local flora and fauna (Honey, 1999). A lack of commitment to conservation results in development beyond sustainable levels. Manuel Antonio National Park exemplifies this problem. The park has been negatively affected by overcrowding, inadequate planning, and over-development of the adjacent community (Honey, 1999). Another problem in Manuel Antonio National Park has been improper waste disposal, which has caused many of its resident monkeys to become garbage feeders (Weaver, 1999).

Ecotourism projects must be willing to place environmental conservation ahead of economic profit in many instances, which means taking on the difficult task of limiting the flow of tourists and their money. The degradation of the natural environment will reduce visitor demand in the long run because the natural environment on which ecotourism depends will be less attractive and not as satisfying for ecologically based experiences (Wearing, 2001). "Finding a compromise between preservation and development is often challenging, and ecotourism can generate additional environmental problems for the very regions it was intended to protect" (Lindsey, 2003, p. 1). This

tension between generating significant foreign exchange and dealing with environmental costs is at the very heart of ecotourism in Costa Rica.

For all the environmental costs of ecotourism, its potential to serve conservation goals should be highlighted. As Wall (1997) puts it, "Ecotourism is an opportunity to preserve ecosystems and biological diversity that would otherwise be lost." (Wall, 1997, p. 484) Ecotourism can also be viewed as a valuable tool for achieving environmental conservation especially in areas where there is a weak presence of government and very little environmental regulation (Wunder, 2000). At the very least, to serve as a means of sustainable development, ecotourism must focus on protecting biodiversity and managing natural resources in a sustainable fashion.

4. Environmental Education

Another extremely important component to ecotourism is environmental education. Whether it is through tour operators, lodges, national parks, private reserves, or different types of ecotourism related activities, education can make a difference. Education is often cited as one of the most crucial elements to ecotourism because it can change the way people (both locals and tourists) think about the environment. "Environmental education is a cornerstone of the ecotourism philosophy-organizers hope that tourists will take home what they learn about delicate ecosystems." (Roberts and Thanos, 2003). The hope is that education can build an environmental ethos, which can extend beyond the immediate scale of the ecotourism venture so that ecotourists become active advocates for conservation in the area visited and their hometowns or countries (Stem et al., 2003).

The most common form of environmental education comes from knowledgeable tour guides. One of the most effective ways to educate tourists and benefit the local community is to hire local guides. One of the advantages of local guides as opposed to foreign guides is their knowledge about the local ecology, natural history, and local culture (Place, 1998). Since tour guides serve as the primary source for environmental education, it is important that they are knowledgeable and well trained. One of the overall problems with ecotourism in Costa Rica has been the lack of experienced and knowledgeable trail guides (Minca and Linda, 2000).

Environmental education is vital to the ecotourism experience, but it is not limited to the tourists. Education can also be important to creating a knowledge base that benefits the local communities as well. Increased awareness and understanding of conservation issues can have a positive impact on local environments and communities and can be passed down to future generations. According to Wearing (2001), "initiatives such as Costa Rica's university and high-school ecotourism programmes will eventually lead to greater local involvement in protected areas and, eventually, the tourism industry" (Wearing, 2001, p. 404). Creating a well-educated public that understands importance of ecotourism to Costa Rica will help benefit the country in the long run.

<u>Chapter 4 – Economic Impacts and Challenges</u>

1. Environmental Economics

The globalization of economic market imperatives is the most powerful force in global decision-making. Some would suggest that the forces of globalized economic markets are what shaped ecotourism and have enabled ecotourism to prosper. Miller and Tangley (1991) stated, "Years ago, the travel agents who first dreamed up the idea of "ecotourism" were clearly looking for new markets, not ways to save the world" (Miller and Tangley, 1991, p. 153). Regardless of whether or not markets are the primary motivation for ecotourism, it is important to understand the important role that economics play in ecotourism. In Costa Rica, protected areas have become increasingly integrated into the global economy (Place, 1998). As globalization and unbridled economic competition continue to dominate the global agenda, it appears that ecotourism's greatest promise may be in its ability to harness the power of economic markets for the purpose of conserving the environment.

Ecotourism, in purely economic terms, is a way of giving nature value, the most basic principle of environmental economics. Roberts and Thanos (2003) emphasize this idea of environmental economics when they state, "Ecotourism developed as a way to commercialize the existence value of sensitive ecological regions, protecting forests and generating employment and income at the same time". Ecotourism has prospered in Costa Rica, largely because it has become more profitable than competing destructive land uses such as agriculture, cattle grazing, hunting, logging and conventional mass tourism (Honey, 1999; Weaver, 1999). Park entry fees and other types of revenue give protected land more economic value than if it was to be deforested (Weaver, 1999).

Following a long period of large-scale natural resources exploitation, Costa Ricans began to realize the enormous value of their natural wealth, which led to the protection of one-quarter of its territory and several international conservation prizes. (Minca and Linda, 2000).

2. Foreign Exchange and Revenue Leakage

One of the most attractive ideas of ecotourism is its capability to earn foreign exchange for developing countries. "Ecotourism, when viewed as a tool for sustainable development in poorer countries, means, in the main, the movement of travelers from the North to the South: from developed to developing countries" (Honey, 1999, p. 73). In theory, one of the goals of ecotourism should be to capitalize on the transfer of travelers from North to South, earning foreign exchange for the developing country and its people. Unfortunately, this has not necessarily been the case in Costa Rica, as well as many other countries, and has become one of the most difficult issues to solve.

Revenue leakage is the term applied to all the money, which escapes from the country and local communities and usually ends up back in developing countries. "In Costa Rica, which by the early 1990's was the number one overseas ecotourism destination for the United States travelers, half of every tourist dollar never left the United States, and only 20 cents actually went into the local economy, according to a USAID study" (Honey, 1999, p. 89). If the economic gain generated from a project is not distributed equitably to the local population, then the community will not be benefiting, as it should. In Costa Rica, too much money leaks out of the local community to pay tour operators, to import products that appeal to foreign tourists, and to pay for tickets on foreign owned airlines (Lindsey, 2003).

Ecotourism can provide an alternative economic base but in order for it to be sustainable, local populations must be allowed to capture a significant portion of the profits generated (Place, 1998). According to many estimates, more than 90% of tourism spending usually leaks out of communities closest to the nature attractions. A study done by Baez and Fernandez (1992) showed that less than 6% of income generated by Tortuguero National Park of Costa Rica would go to local communities (Lindberg, 2001). Many experts question the contribution of ecotourism to local development, saying that the biggest challenge is making sure it brings economic benefits to the local people (Stem et al., 2003; Miller and Tangley, 1991). One way to combat revenue leakage could be through legislation, which could require that a certain percentage of profits be recycled to local community development (Bookbinder, Dinerstein, Rijal, Cauley, and Rajouria, 1998).

3. Local Business, Local Labor, and Household Income

Local communities can welcome ecotourism if they believe that it can have a positive impact on their everyday life by improving local businesses, utilizing local labor, and increasing overall household income. "Many permanent residents living in or adjacent to potential ecotourism destinations may desire to improve life opportunities for themselves and their children and may see ecotourism as generating jobs, stimulating incomes, diversifying economies, and enhancing standards of living" (Wall, 1997, p. 483). The key to gaining local enthusiasm for an ecotourism project is to do as much as possible to ensure that benefits are equitably shared and that no one shoulders a disproportionate share of the cost (Lindsey, 2003). One of the best ways that ecotourism

can maximize its contribution to the local communities is for local residents to be involved in its management and operations (Stem et al., 2003).

Monteverde Cloud Forest private reserve is an excellent example of an ecotourism project that has had great economic success (Aylward, 1996). One study found that it generates more income from tourism than all of the Costa Rican National Parks put together (Langholz and Brandon, 2001). There is also strong evidence that in Monteverde has been contributing to higher household income and better overall standards of living for local people. Ecotourism has now surpassed dairy farming as the community's main source of income (Honey, 1999).

While the Monteverde Cloud Forest Reserve has proven that tourism can be economically productive, there is major concern that ecotourism in other areas of Costa Rica, which are not as well managed, are not benefiting local economies and are creating relatively few low paying jobs for local people. (Minca and Linda, 2000). Sometimes in a very small community a few low paying-jobs can mean a lot but there is still no doubt that in order to be successful, ecotourism projects should focus on retaining as much work for locals as possible, integrating local economies, and making sure that economic well-being of households are improved rather than depreciated. Employment opportunities must be retained for the local people rather than being given to outsiders who may have more experience. "Certainly, bringing in outsiders to run all aspects of the project is undesirable, since it not only divorces the community from the effort, reducing their interest in supporting it, but ensures that they will not profit from it, limiting their ability to service without turning to unsustainable industries" (Lindsey, 2003, p. 8).

One negative impact of ecotourism is that it can lead to an increase in cost of living for local people (Wearing, 2001). One study in the Osa peninsula showed that ecotourism has left its inhabitants even poorer than before, while transforming the area into the "ultimate" attraction for ecotourists. As a result of ecotourism in the region, natural resources that once provided livelihoods for local people, only generated profits for outsiders, and the local communities were left with very little (Mica and Linda, 2000).

Another study, which was done on Tortuguero, shows how the failure to integrate local economies into ecotourism can have negative consequences. Tortuguero national park was created in 1975 primarily to protect the last remaining major green turtle nesting beach in the western Caribbean. In the case of Tortuguero, local entrepreneurs have shown interest in providing services to the growing number of tourists visiting but have not had such an opportunity. The pace of outside investment has not allowed the villagers time to accumulate their own capital to invest in tourist facilities and services. Also, the government has not taken the initiative to help local entrepreneurs, instead opting to help only foreign investors. This is not encouraging, especially considering that with only minimal help, local entrepreneurs could contribute a substantial amount to building a tourism-based economy with a number of local economic multipliers. Advocates of sustainable development would argue that local entrepreneurs should have the opportunity to take advantage of the growth in tourism before their options are completely overtaken by foreign investment (Place, 1998).

Ecotourism should be able to help local businesses dramatically increase revenues because it can bring people closer to local markets. It can be an important, low-cost mechanism for local businesses and artisans to market and sell their goods. Ecotourism

can serve as a spin-off for many other businesses, especially those in the informal sector (Stem et al., 2003). In order to be most effective, ecotourism should be focused on mechanisms, which link the local economy to other local economies, national economies, and international economies.

If tourism is to promote community development in Tortuguero, the Osa Peninsula, and other more isolated regions of Costa Rica, it will need to focus on expanding, improving, and promoting locally owned businesses (Place, 1998). The ultimate economic goal of ecotourism should be to contribute to the economic growth of the local community so that revenues are helping to meet the needs of the local people and are being reinvested into the community in order to improve it. Revenues from ecotourism need to be channeled into programs that benefit the local community, such as research, education, and health care. If money generated from ecotourism is distributed equitably, the project can become sustainable and the long-term economic prospects of the community can be enhanced (Lindsey, 2003).

4. Marketing and Green Washing

Marketing is a key economic element for successful ecotourism and is one of the most important components of the travel industry in general. As the demand for ecotourism has increased, the tourism industry has taken notice. "The growing public concern with the environment and interest in outdoor-oriented travel, coupled with the growing dissatisfaction with conventional mass tourism, showed the tourism industry that there was a sizable market for ecotourism" (Honey 1999, p.19). The tourism industry has come to view ecotravel as a marketing tool to attract the growing number of environmentally and socially conscious travelers (Honey, 1999). "According to a 1995

survey by the Travel Industry Association of America (TIA), some 83% of travelers support "green" travel companies and are willing to spend more for travel services and products designed to conserve the environment" (Honey 1999, p.19). Moreover, travel consumers interest in environmentalism seems to be increasing (Honey, 1999).

Over the years, promotional materials for nature tourism and ecotourism have developed a distinct style designed to sell "experiences" rather than products (Honey, 1999). Marketing is one of the ways that foreign owned companies have been able to distance themselves from smaller locally owned ecotourism in Costa Rica. Many smaller locally owned ecotourism companies in Costa Rica cannot compete with the foreign owned companies, which can use elaborate marketing schemes to create a competitive advantage.

As a result of the ecotourism boom in Costa Rica, the tourism industry has been trying to tap into the demand any way they can, even if it means through exploitive marketing. Exploitive marketing of ecotourism, also known as "green washing" has become a serious problem in Costa Rica with the travel industry essentially trying to capitalize on the market trend by all means necessary. Many of these companies use buzzwords like "eco" and "green" to try to market a product as ecotourism, which actually has very little or no environmental responsibility. Advanced marketing techniques allow much of the travel industry to appear "green" without making fundamental or costly reforms (Honey, 1999). "These environmental opportunists package the same travel that was once considered exploitative in a green ribbon, and travelers return home with the illusion that their luxurious vacation was actually good for the environment" (Roberts and Thanos, 20003, p. 84).

It is unfortunate that green washing has become so widespread, considering that the sustainability and profitability of the ecotourism industry depends in large part on protecting the environment. It is also unfortunate because many tourists that are actually seeking a true ecotourism experience and have the desire to contribute to conservation are misled by half-truths and exaggerations. According to Honey, "Ultimately, the goal must be to move ecotourism beyond simply a new niche within nature travel. It must become a vehicle for significantly transforming the way tourism itself is carried out, for "greening," not merely "greenwashing," the entire industry" (Honey, 1999, p.21). While real ecotourism is still growing, the spread of greenwashing and watered-down ecotourism may continue to overwhelm the tourism industry.

5. Risks

When poor rural areas are introduced to global economies there are many economic risks involved. One of the risks of integrating local communities into ecotourism is that they can become dependant on tourism to generate income. This can be risky because tourism is a notoriously volatile economic activity, which is subject to booms and busts. Ecotourism is also very seasonal and the tourism market tends to fluctuate over time. Tortuguero's experience shows how even remote rural areas are affected by outside events and trends, often the result of decisions made by outsiders and over which local people have no control (Place, 1998).

Another risk of integrating local economies into ecotourism, which has certainly impacted certain regions of Costa Rica, is that foreign investment can completely take over. Too much foreign investment has become a serious problem in Costa Rica because it has negatively impacted Costa Rica's national identity and pride. When so much of the

country is owned and run by outsiders the local people don't have any sense of ownership and the effects on local markets can be crippling. One example of the negative impact of foreign investment is the real estate market, which has become so distorted and prices have inflated so dramatically that many Costa Ricans have been priced out of land and home ownership (Place, 1998). Inflation can lead to dramatic increases in the cost of consumer goods, real estate, and overall cost of living, which can force people to have to leave the area. According to Roberts and Thanos (2003) "as long as ecotourism remains dependant on the international economy it appears it will be influenced, and ultimately overpowered by the corporations that dominate the industry" (Roberts and Thanos, 2003, p. 86). While the promotion of foreign exchange for developing countries like Costa Rica can certainly be appealing, the economic risks associated with ecotourism and globalization need attention.

Chapter 5 - Social Impacts and Challenges

1. Stakeholder Participation and Community Involvement

In order to ensure that ecotourism is beneficial to local communities they must be included in all phases of planning and implementation. Unfortunately, communities have not traditionally been part of the planning process and private operators rarely ask the community about their vision for the area. Planners who don't understand the intricacies or functions of the host community and local resources usually make decisions relating to the likely impacts on the area (Wearing, 2001). Ecotourism can only be effective in promoting sustainable development if it is geared towards benefiting local communities. "Unless a more sustainable planning approach to tourist development is implemented, the risk that it contributes to a loss of autonomy and control by the local community is quite high" (Minca and Linda, 2000, p. 124).

Inadequacies in stakeholder participation and community involvement are a serious concern for ecotourism. Since local populations ultimately have the greatest stake in the outcome of any ecotourism project, a conscious effort must be made to include them in the decision-making process. Stakeholder participation and community involvement must be central to any ecotourism project in order for it to thrive and be sustainable. When the local community is effectively represented in the decision-making process and has direct involvement it can influence the process and outcomes so that the community can prosper. The local community must be actively engaged in just about every aspect of an ecotourism project in order for it to contribute both the well being of the project as well as the local community. According to Place (1998), "there is still room

for an alternative route to development, based on grassroots initiative and participatory planning that can promote more authentic, sustainable tourism." (Place, 1998, p. 117)

According to Wearing (2001), the overall objective of an ecotourism-based approach should be a process that a supportive community wants and controls. This support is important because it results in an environment that is more receptive to tourists (Wearing, 2001). Community participation is also important for identifying negative impacts on people who live in areas undergoing ecotourism development (Place, 1998). The information gained from community input can be used by planners to guide decision-making. While a community-based planning process may appear simple in theory, it is complicated by several factors, such as conflicting interests among stakeholders and state policies that promote centralized planning and the accumulation of capital among large tourism enterprises. If communities can be involved in the planning process from the beginning, this can reduce the future likelihood of conflict and misinformation. (Wearing, 2001).

2. Cultural Sensitivity

Ecotourism, in general, can contribute to the disintegration of local communities' social and cultural structures (Stem et al., 2003; Boo, 1999). The cultural dynamics of communities must be well understood in order for ecotourism to be sustainable. Ecotourism depends upon the acceptance and support of the local community. Problems will arise if a community does not support ecotourism and feels threatened by it, as has been the case in many rural areas throughout Costa Rica. Ecotourism should preserve or even enhance the culture of a community. One way to enhance the ecotourism project and protect the native culture is to utilize the local knowledge and skills of the people.

Local knowledge about the terrain, ecology, and natural history can be valuable for guiding tourists and skills in arts and crafts can be used to display local culture. Culture can even be incorporated into planning and marketing of ecotourism destinations and products (Wearing, 2001). According to Boo (1990), ecotourists are more likely to appreciate local tradition, customs and cuisine than other market segments.

One serious impact of ecotourism is that it can lead to the "commofication" of culture. When people and their cultures become marketable commodities, this can lead to the erosion of the culture and community cohesion (Stem et al., 2003). The dangers associated with bringing formerly isolated populations into contact with affluent foreigners can be quiet high. Local populations may modify traditional cultures in the form of food, handicrafts, song, and dance in order to meet the different cultural standards and expectations of foreign tourists (Place, 1998). Local community members could possibly view their area as being developed exclusively for foreign interests (Wearing, 2001).

One advantage of ecotourism is that it is less threatening to cultures than mass tourism (Place, 1998). Additionally, ecotourism does not necessarily mean that cultures will be negatively impacted. Ecotourism can potentially be very beneficial to local culture. According to Minca and Linda (2000), "if properly developed, tourism is capable of supporting a new awareness and new representations of the local culture that can be revitalized by the interest of the tourist" (Minca and Linda, 2000, p. 125). Ecotourism has the potential to foster greater appreciation of local cultures for tourists as well as the community members themselves if culture is appropriately integrated into ecotourism projects.

3. Labor Skills and Training

Many argue that ecotourism provides relatively few jobs that are only low paying. Some of the primary employment opportunities through ecotourism are jobs such as hotel servicing, craft making, shop ownership, tour operations, government agency staff, and park rangers (Wearing, 2001). This is partly due to the fact that ecotourism depends on a lack of infrastructure and businesses are small with outsiders already staffing most management positions. Ideally locals should buy and manage small businesses such as accommodations, but this is not possible due to the financial roadblocks they face. Banks and Government programs often discriminate against the rural poor. It is also unreasonable to expect locals to be able to switch to ecotourism jobs right away and manage such operations successfully without the necessary knowledge and training (Wearing, 2001). While the local culture must be respected, local people must still be trained so that that they can work in an industry which relies on communicating with international visitors.

Costa Rica has made attempts to incorporate local communities into protected area management with an emphasis on training of local community members in the areas of park maintenance, interpretation, management, and habitat restoration (Wearing, 2001). Overall, Costa Rica must find more ways to provide poor local people with micro-credit financing and training skills in order for the ecotourism industry to be sustainable. The government could do more to provide small locally owned businesses a competitive advantage through subsidies, duty exemptions, and other types of incentives. Even innovative and responsible locally owned ecotourism projects falter because they cannot get sufficient investment loans and they are forced to compete with large foreign

companies (Honey, 1999). There is some evidence to suggest that when given the opportunity, small locally owned businesses could be very successful (Place, 1998).

There are also some auxiliary long-term employment opportunities, which are open to local populations and can improve quality of life. Training small guides and tour operators as well as park managers and park rangers, offers employment opportunities for rural community members with knowledge of the area. Local people possess practical and ancestral knowledge of the natural areas. This knowledge combined with proper training and education in areas such as languages, and environmental and natural history skills are crucial to these types of jobs. Training and education systems can be developed all the way down to the children of the local people so that they will be ready and able to participate in future tourism operations. Other opportunities that can be created through ecotourism are construction and maintenance personnel, gardeners, waiters, cooks, and cleaners. Many of these opportunities may be able to provide women with employment (Wearing, 2001).

4. Capacity Building

As mentioned in the chapter on economic impacts and challenges, a goal of ecotourism is to ensure that profits from ecotourism are reinvested into the community. Ecotourism should be able to enhance the long-term prospects of a community and give them opportunities to increase their overall well-being. Additional revenues should be channeled into programs that will directly benefit the local people such as health and education. According Ryan (2002), ecotourism should be able to add value to environments, communities, entrepreneurs, and tourists within ethical objectives.

The importance of stakeholder collaboration and community participation must be stressed for its potential role in community capacity building. When a process in which direct knowledge, experience and understanding from the community forms the basis for the management of socio-cultural impacts, communities can engage in ongoing development and enhancement through ecotourism (Wearing, 2001). When people are central to ecotourism and the community supports it, there is a greater likelihood they will devote their time and energy to it, understanding that the success of ecotourism is directly linked to their capacity to achieve greater standards of living and other additional benefits.

Chapter 7 - Key Actors

1. International Aid and Lending Institutions

International lending institutions such as the World Bank, Inter-American, Development Bank, and USAID play an increasingly important role in ecotourism on a global scale. With the rise of both the environmental movement and Third World debt in the late 1970's, international aid and lending institutions took a new look at tourism as a development tool and conservation strategy. Since the 1970's when the World Bank became a major source of finance for tourism-related projects, it has been pushing developing countries to invest in tourism as a strategy for encouraging foreign investment and earning foreign exchange (Honey, 1999). Costa Rica has not hesitated to hop on board with initiatives supported by international aid and lending institutions like the World Bank.

USAID has been another international institution, which has been involved in a great deal of ecotourism project because ecotourism fits within the agency's broad objectives of promoting national economic growth and conserving biodiversity (Honey, 1999). As a result of its potential to meet such objectives, there has been an increasing level of activity related to ecotourism within USAID (Honey, 1999). "In 1985, USAID began its support of ecotourism activities by funding some twenty conservation and development projects in developing countries carried out by the World Wildlife Fund for Nature; in 1989, the agency initiated its Parks in Peril project to improve management as well as recreational and educational use of twenty parks in Latin America and the Caribbean" (Honey 1999, p.17). USAID's support for ecotourism in developing countries continued into the 1990's. By the mid 1990's USAID had 105 ecotourism-

based projects, totaling more than \$2 billion in funding (Honey, 1999). Costa Rica has long been a beneficiary of ecotourism projects sponsored by USAID.

During the 1980's and 1990's international aid and lending institutions, which view ecotourism primarily as an enterprise-based approach to conservation, were supporting a variety of ecotourism programs and projects in Costa Rica (Honey, 1999). International lending and aid agencies such as the World Bank and USAID have pumped millions of dollars into projects involving ecotourism with an ideology focused on sustainable development, local income generation, biodiversity, institutional capacity building, and infrastructure development (Honey, 1999). The efforts of these institutions in Costa Rica have played a major role in the transformation of the ecotourism industry in Costa Rica. These institutions will continue to play an important role as ecotourism becomes more mature and more developed.

2. The State

The role of the state in ecotourism development throughout Costa Rica has been pivotal over the years. The Costa Rican government has been cited for many of its positive contributions to promoting a sustainable ecotourism industry. The government of Costa Rica has won several awards such as the ASTA/Smithsonian Magazine award for rain forest protection (Honey, 1999). Although the government has received plenty of recognition and positive reinforcement from the international community, they have also fallen short in some important areas of ecotourism development. Perhaps their most obvious failure, especially of the Costa Rica Tourism Board (ICT), has been putting large amounts of time and money into promoting foreign-owned resorts, mass tourism developments, and private parks rather then concentrating on promoting abroad its

national parks and smaller locally owned ecotourism projects which focus on community development (Honey, 1999). The Costa Rican government has decided to promote tourism aggressively as a development strategy, but it focuses too much on mass tourism in order to maximize capital accumulation (Place, 1998). Its relaxed attitude towards foreign investors and logging companies is also not encouraging sustainability. However, this approach is not suprising, considering the government's need for foreign currency and the high levels of public debt (Minca and Linda, 2000).

Government policies have always favored mass tourism over comparatively small-scale ecotourism. Ecotourism development has for the most part come from foreign and domestic non-governmental organizations (NGOs), individuals, and local community associations (Weaver and Schluter, 2001). There is no doubt that the Costa Rican government has played a major role in developing ecotourism and has made several monumental contributions. The Costa Rican Government may believe they have found a possible solution to balancing conservation and development through ecotourism, but there is still plenty of room for improvement and they could be doing more. Unfortunately, the states role and funding for ecotourism are being downsized (Honey, 1999).

3. NGO's and Grassroots Organizations

NGO's and Grassroots Organizations are becoming more and more influential in the ecotourism industry of Costa Rica. International and national NGO's, which are focused on conservation, in particular, have initiated ecotourism-linked departments, programs, studies, and field projects (Honey, 1999). According to Minca and Linda (2000), "The conservation NGO's are contributing greatly towards the improvement of

local people in the tourism sector, as well as towards the improvement of their agricultural techniques through programmes of training and environmental education described previously". Many of these organizations are also conducting nature tours, adventure tours, and ecotours for their members. "The main purpose of these trips are to promote the education and professional development of members, showcase the organization's projects in other countries, provide fun and relaxation for travelers, raise revenue for the organization, and give members a tax break." (Honey, 1999, p. 71) The Smithsonian Institute, World Conservation Union (IUCN), World Resources Institute (WRI), Nature Conservancy, Audubon Society, World Wildlife Fund, Earthwatch Institute, and the Sierra Club are some of the organizations, which have been very involved (Honey, 1999).

Grassroots organizations have also been important to ecotourism in Costa Rica. For example, one grassroots organization, a national eco-agricultural cooperative network called COOPRENA, has begun to promote community-based ecotourism initiatives. Six farming cooperatives now offer ecotourism as part of a diversified livelihood strategy designed to promote community-based ecotourism initiatives. The cooperative is helping farmers design ways to use their land productively while also conserving natural resources and generating employment and other socio-economic benefits (Place, 1998). These types of organizations are increasingly important for empowering the marginalized segments of the Costa Rican population.

4. The Private Sector

The private sector clearly has played a vital role in the development of the ecotourism industry in Costa Rica. "Throughout most of the world, the rise of ecotourism

has coincided with the promotion of free markets and economic development, with the private sector hailed as the main engine for development" (Honey 1999, p.18). Since the late 1980's major tourism associations such as World Tourism Organization (WTO), Travel Industry Association of America (TIAA), American Society of Travel Agents (ASTA), World Travel and Tourism Council (WTTC) have endorsed ecotourism. (Honey 1999).

One of the dangers with the private sector is that when it is unregulated and undertaxed, there is an influx of foreign companies, so that most profits get away from those communities surrounding the area and out of the Costa Rica (Honey, 1999). In addition, the private sector is well known for trying to exploit the market demand through green washing and phony promises and claims. The fact that the private sector is so involved in ecotourism can be discouraging, but the benefits that the private sector can bring should not be overlooked. Although a large majority of the private sector may not be providing positive outcomes, there are several companies that have been truly putting forth the effort to make a positive impact on ecotourism in Costa Rica.

Costa Rica Expeditions is one example of a company that has been beneficial to the industry. They argue, "if tourism does not contribute to the protection of local flora and fauna, the prevention and repair of environmental degradation, the economic well-being of local communities, and respect for local cultures then it is not a justifiable activity" (Buckley, 2003, p. 137). They are well known for their whitewater rafting expeditions, tours to many of the countries protected areas, and three ecotourism lodges, which use solar energy systems and water saving fixtures. Costa Rica Expeditions have been very active in conservation efforts related to ecotourism. Some of their efforts

include a lead role in prosecuting people who bulldozed an illegal road in Tortuguero National Park and significant annual donations to the Costa Rica National Parks Foundation, the Costa Rica National Parks Service, and the Costa Rica Conservation Association. The company also makes a concerted effort to contribute to local communities by buying local supplies and services as well as training many Costa Rican guides. Costa Rica Expeditions has run trips for the Nature Conservancy, the World Wildlife Fund for Nature, and Conservation International. Over the years they have built an international reputation for their environmentally conscience business (Buckley, 2003).

Rara Avis is another example of a privately owned ecotourism venture, which has had a significant positive impact. Rara Avis is a publicly held Costa Rican corporation, which was established in 1983. All together the company has purchased 958 hectares of primary rainforest. Rara Avis has two rainforest lodges, which can occupy about 40 people together, and a biological station located within the reserve. It is adjacent to Braulio Carillo National Park and the Zona Protedora La Selva. The park has been profitable since 1990 and an expansion is planned. The flora and fauna of this reserve are splendid, with over 360 bird species having been recorded. Rara Avis has made important contributions to conservation, biological research and environmental education. Rara Avis sponsors a butterfly-breeding project for export to northern hemisphere zoos, cultivates tree seedlings for reforestation, maintains a live collection of canopy orchids, and supports a range of research and education projects (Buckley, 2003). These types of initiatives from private companies and corporations are evidence that the private sector can make important contributions to ecotourism.

5. Tourists

The tourists themselves can play an important role in making sure that benefits of ecotourism reach the communities. Tourists should choose their tour operator carefully, educate themselves about ecotourism, take a trip sponsored by a conservation organization, and be a responsible traveler once they are at an ecotourism destination (Lindsey, 2003). Consumers of ecotourism have a responsibility to research their travel destinations and support enterprises that reflect their convictions (Roberts and Thanos, 2003). One of the best ways to ensuring ecotourism's sustainability is helping to build a more discriminating and informed traveling public (Honey, 1999).

It is important that international travelers as well as the domestic tourists are well informed. Unlike many other developing countries, Costa Rica has a significant amount of domestic tourism, which is a reflection of the substantial size and high education level of its middle class. Ecotourism and the national park system have become an important source of national pride, reflecting a growing interest in environmental issues and conservation of the country's unique biological resources" (Place, 1998). Both international and national tourists can have a tremendous influence on the ecotourism industry in Costa Rica.

Chapter 8 - Policy Implications and Recommendations

1. Evaluating Ecotourism and Sustainable Development

Evaluating ecotourism as a form of sustainable development can sometimes be difficult because neither of the two concepts is universally defined (Roberts and Thanos, 2003). While this difficulty with definitions creates a challenge, it does not nullify the need for finding ways to try to measure the sustainability of ecotourism. The most feasible way to accomplish such a task is to develop sustainability indicators. The search for sustainability indicators is still in its infancy, both with respect to the process and to content. According to Sirakaya et al. (2001), "until recently, tourism and ecotourism have been mostly evaluating in terms of their potential for economic growth in many countries and communities around the world" (Sirakaya et al., 2001, p. 411). While economic indicators can be useful, they usually measure growth, not progress. Measures like GDP and unemployment externalize social and environmental costs and do not capture vital aspects of sustainable progress. Indicators of sustainability for ecotourism are different then traditional development indicators because they take into consideration the web of complex interrelationships and interdependencies of resources and stakeholders involved (Sirakaya et al., 2001).

Given the essential ecotourism criterion of sustainability, indicators are essential for monitoring impacts of ecotourism and should be part of strategic planning and management (Sirakaya et al., 2001). It is important to develop a set of indicators that are rigorous, credible, efficient, holistic, and useful to decision makers. They also should be flexible so they can be adapted to different ecotourism destinations and their specific context (Sirakaya et al., 2001). "To evaluate the past, guide the action of the present, and

plan for the future, we need to know what to monitor, what data to collect and what to measure. In other words, to track changes in social, natural, cultural, economic, and political arenas of ecotourism destinations, we need several sets of sustainability-centered ecotourism indicators based on their policy relevance, analytical soundness and measurability" (Sirakaya et al., 2001, p. 412). Good indicators provide decision makers with information that enables them to identify, evaluate and make timely decisions on critical changes being caused by ecotourism to the natural environment, communities and other resources. In theory, all forms of ecotourism can be differentiated as either sustainable or unsustainable but there is still a great deal of uncertainty regarding indicators for measuring and monitoring sustainability. Furthermore, ecotourism, which appears to be sustainable in the short-term, may prove otherwise in the long run (Weaver, 1999).

The need for evaluating the sustainability of ecotourism is important not only to measure its effectiveness as a development strategy but also as a way to identify and reward companies which practice responsible ecotourism rather than those that are merely green washing. Many organizations have created codes of conduct or certification programs for ecotourism practices. While these may appear to be good in principle, they have no teeth and are subject questions of credibility. Many codes of conduct or certification programs for ecotourism have received criticism due to the fact that many undeserving companies have been rewarded certification. In Costa Rica, the Certificate for Sustainable Tourism (CST) is a recently established certification program, which has gained credibility because of its rigorous nature. Certification critics have described the

CST system as one of the most widely respected sustainable certification programs (Buckley, 2003).

The Costa Rica Tourism Board heads the CST program and has been in charge of setting up a classification system for hotels and lodges. The board can now categorize hotels using a series of green bands ranging from zero to five to measure environmental and social responsibility (Honey, 1999). "The program seeks to categorize and certify each tourism company according to the degree in which its operations comply with a model of sustainability" (Costa Rica Tourism Board, 2004). The companies are evaluating based on the following criteria:

1. Physical-biological parameters

Evaluates the interaction between the company and its surrounding natural habitat.

2. Infrastructure and services

Evaluates the management policies and the operational systems within the company and its infrastructure.

3. External clients

Evaluates the interaction of the company with its clients in terms of how much it allows and invites the client to be an active contributor to the company's policies of sustainability.

4. Socio-economic environment

Evaluates the interaction of the company with the local communities and the population in general.

(Costa Rica Tourism Board, 2004)

Each of these items corresponds to a list of specific questions, which were designed to help evaluate how thoroughly the firm complies with a series of social, environmental and economics standards. The questions refer to an element of sustainability with which the firm should comply in order to qualify in any one of the levels of fulfillment. The final rating is assigned to the company according to the lowest

level achieved in all of the four fields evaluated. The purpose of this policy is to encourage companies to advance towards the model of sustainability by giving the same degree of consideration and importance to each of the four areas evaluated in order to provide a clear way to classify the tourism firms in terms of levels, just like the commercial categorization of hotels which uses the stars system (Costa Rica Tourism Board, 2004). Table 3 shows the correlation between the levels and the percentage of attained.

Table 3: Certificate for Sustainable Tourism Rankings

Level of Sustainability	Minimum percentage of compliance for all four general areas
0	< 20
1	20-39
2	40-59
3	60-79
4	80-84
5	> 94

If the level 1 of a category is achieved, this means that the firm has taken the first step on the path or process of sustainability. If a company reaches level five, this means that the company is considered outstanding in terms of sustainability. The level assigned to any firm will always be the lowest level achieved in any of the areas. An evaluation categorization questionnaire is used in order to evaluate the level of sustainability of a tourism sector business. Each question evaluates a specific standard or condition with which a hotel needs to comply with for one of the four areas. The questions are weighted by their relevance on a scale of one to three, with three being the most important. The categorization questionnaire has 153 questions divided into descriptors of the four general areas. The general descriptors all represent sources of positive and negative

impacts generated by the hotel activities (Costa Rica Tourism Board, 2004).

List of Descriptors by Areas

A. Physical-biological parameters

- 1. Policies and programs
- 2. Emissions and wastes
- 3. Gardens
- 4. Natural areas
- 5. Protection of Flora and fauna

B. Infrastructure and services

- 1. Formulation of policies
- 2. Water consumption
- 3. Energy consumption
- 4. General supplies consumption Food and beverages Cleaning and cosmetic supplies supplies
- 5. Waste management Organic waste Inorganic waste Final destiny
- 6. Employee training

C. External Clients

- 1. Communication and involvement
- 2. Room conditioning (management)
- 3. Management of guest groups
- 4. Customer feedback measurement

D. Socio-economic environment

- 1. Direct economic benefits for local communities
- 2. Non-direct economic benefits for local communities
- 3. Contribution to the promotion of local culture
- 4. Contribution to public health
- 5. Infrastructure and security

Although the program has been designed for all types of companies in the tourism industry, the first stage only includes lodging companies. The CST system is designed to include incentives that will increase in benefits for each company, in direct proportion to its increased rating. As the rating increases, more benefits will be received such as international and national publicity and promotion, training for personnel, and participation in various world tourism fairs and events. Participation in the program is

entirely voluntary and is open to all lodging companies that wish to participate regardless of location or size. The program and the initial evaluation are offered at no cost to the companies (Costa Rica Tourism Board, 2004). While the Certification for Sustainable Tourism is totally voluntary, it is still a much-needed step in the right direction. The CST program provides an excellent tool for benchmarking sustainable tourism lodging in Costa Rica. The expansion of such a program to more businesses related to ecotourism could have a positive impact on promoting sustainable development within the industry.

2. Integrated, Collaborative, and Comprehensive Planning Approaches

Ecotourism is such a complex phenomena that it depends on an integrated, collaborative, and comprehensive approach to planning. "Planning involves many actions, participants, fields of knowledge, and levels of decision-making and implementations" (Backman, 2001, p. 447). Ecotourism can by no means be viewed as an isolated activity. It is so interconnected and so interdependent upon multiple systems that it should be viewed in an integrated and comprehensive context. It is helpful to consider the links between ecotourism and other projects and activities in policy and planning. In Costa Rica, like in many other countries, ecotourism is being developed within the countries overall development strategy. This is an important concept since the macrolevel of planning of ecotourism is especially important.

An approach to ecotourism policy and planning should focus on the interconnectivity of ecotourism to other organizations and activities and focus on ways to integrate them accordingly. "Ecotourism is a field very dependent on effective planning and policy development at all levels of government, non-government organization (NGO) sector and business." (Backman, 2001) Collaboration and cooperation between key actors

is crucial to successful ecotourism policy and planning. As chapter 7 highlighted there are several key actors in ecotourism policy and planning. More collaboration between these key actors can lead to more shared information and improvements in decision-making. There must be better coordination between government agencies. Government departments of public works, transportation, environment, immigration, investment, and education all set policies impacting ecotourism. (Backman, 2001) The enormous scope of information necessary to successfully develop and manage an ecotourism industry depends on contributions from many key actors. Collaborative and innovative approaches to solving problems and sharing information can be extremely helpful (Backman, 2001)

3. Future Research Needs

Current literature indicates that there has been a fair amount of progress in several areas of ecotourism research but there are still gaps in knowledge that need to be addressed. Many of the impacts and challenges mentioned throughout this paper require further investigation. According to Honey (1999), "There are, in fact, pressing issues surrounding ecotourism that are crying out for deeper investigation, more rigorous analysis, more careful theoretical work" (Honey, 1999, p. 83). There is a great deal of need for an improved comprehension of the complex web of relationships within ecotourism. A better knowledge base of the complexities of ecotourism will be crucial to improving planning of future development (Minca and Linda, 2000).

One of the major problems in ecotourism research has been the lack of experiments that take baseline measurements prior to development and then track environmental change over time (Weaver, 1999). Monitoring and evaluating ecotourism has been a major area of need, and sustainability indicators are only now being tested.

Quantitative measures such as sustainability indicators and qualitative data of from local populations and the tourist should continue to be collected and analyzed.

Qualitative measures can be extremely useful. According to Minca and Linda (2000), "Further research could focus more concretely upon local pattern of development, relying upon specific field surveys aimed to address key issues such as local involvement (qualitative and quantitative), the success of local tourism investors and actual improvement in sustainability brought by environmental NGOs' programmes" (Minca and Linda, 2000, p. 124). Many areas of research are yet to even be explored. For example, "There is at present no systematic effort to gather data worldwide on ecotourism as a category distinct from nature, wildlife, and adventure tourism" (Honey 1999, p. 6). Ecotourism has become such a global phenomena that the need for more research is becoming more of a pressing issue.

Chapter 9 – Conclusion and Discussion

In order for ecotourism to encourage patterns of sustainability, which can benefit local communities, protect the environment, and be economically viable, it must be comprehensive and account for the complexity of issues that have been mentioned in this paper. Failures to identify the impacts and challenges of ecotourism and confront them will likely lead to projects that do not benefit local communities, are environmentally destructive, and will not thrive in the long run. According to Wearing (2001), "neglect of conservation and quality of life issues threatens the very basis of local populations and the viable and sustainable tourism industry" (Wearing, 2001, p. 407). Unfortunately, exploitation of natural areas for instant profit is a common mistake motivated by human's shortsightedness. Social equity and environmental responsibility must be pushed to the forefront of the policy agenda in order to maximize ecotourism's potential to promote sustainable development.

The scientific community, the tourism industry, the development field, the tourists who visit natural places, and local populations impacted by ecotourism must continually be educated and informed about ways to promote successful ecotourism policies and practices. Important social, economic, and environmental imperatives must be in place in order for ecotourism to meet its potential to promote sustainable development and benefit local communities. A shift into a mindset where ecotourism development is no longer thought of in purely economic terms is necessary for the future of ecotourism.

It is no minor task to account for all of the variables that must go into ecotourism for it to be successful. A positive outcome is by no means assured and depends on how development is planned and implemented (Place, 1998). Every effort must be made to

make sure that ecotourism is carefully planned and properly implemented. Finding solutions to the problems associated with ecotourism will likely be different for each project since different regions of Costa Rica are each unique. Ecotourism plans should be innovative, flexible, and adaptive enough so that they serve the specific needs of each particular community, which may change over time.

As the market for ecotourism continues to increase it will add pressure on environmentally sensitive areas and communities throughout Costa Rica. Ecotourism is becoming a more attractive option for the Costa Rican government and businesses. As the number of ecotourism sites in Costa Rica increases, there is a need for a corresponding increase in education, awareness, and dedication to ecotourism principles so that it provides social, economic, and environmental benefits. While ecotourism may not be a panacea for solving all the development issues in all developing countries, Costa Rica seems to have a unique potential to support sustainable development. The key is to balance social, economic, and environmental goals. To some extent, ecotourism in Costa Rica has already proven that it can provide benefits to communities, bolster economic productivity, and protect the environment simultaneously.

Ecotourism in Costa Rica shows the paradox of ecotourism and sustainable development. On one side of the spectrum there is pure ecotourism, which is founded on the guiding principles of ecotourism, with practices and policies geared towards sustainability. On the other side, there is water-downed ecotourism, which lacks the true substance that makes ecotourism sustainable. In this case economic ambitions usually overshadow the potential social and environmental benefits of ecotourism. In between pure and watered-down ecotourism there is ecotourism, which is only partially

sustainable. Some have argued that only pure ecotourism offers the possibility of long-term sustainability (Stem et al., 2003).

The failures of ecotourism in Costa Rica serve as a stark reminder of the challenges and impacts of ecotourism while the successes point to the promise and potential. As a whole, Costa Rica has shown signs that ecotourism is not a façade nor is it a panacea. It can work as an effective development strategy but it can also lead to negative consequences. "At its worst, when not practiced with the utmost care, ecotourism threatens the very ecosystems on which it depends. At its best, ecotourism offers a set of principles and practices that have the potential to fundamentally transform the way the tourism industry operates" (Honey, 1999, p. 5). So while ecotourism may not always be the best option, its potential to promote sustainable development is certainly a good enough reason for it to garner consideration as a credible development strategy.

Ultimately it is too soon to tell whether or not ecotourism as an entire industry in Costa Rica will prove to be sustainable. The long-term sustainability of ecotourism in Costa Rica will likely depend on whether or not the ecotourism industry learns from its mistakes and begins to take a more compassionate approach to ecotourism planning. Several key actors, most notably the state and the private sector, must take more proactive measures to influence the outcome of ecotourism and ensure that the benefits of are maximized and the costs are minimized. The best way to improve planning policies and practices of ecotourism in Costa Rica is to utilize the guiding principles of sustainable development as the foundation for decision making, to ensure that social, economic, and environmental obligations are equitably managed.

References

- Aylward, B., et al. (1996). Sustainable ecotourism in Costa Rica: the Monteverde Cloud Forest Preserve. *Biodiversity and Conservation*, 5, 315-343.
- Boo, E. (1990). *Ecotourism- The Potentials and Pitfalls* (Vol. 1). Lancaster: Wickersham Printing Company.
- Boo, E. (1999). Making Ecotourism Sustainable: Recommendations for Planning, Development, and Management. In T. Whelan (Ed), *Nature Tourism: Managing for the Environment* (187-199). Washington, DC: Island Press.
- Backman, K.F. (2001). Planning, Management and Institutions. In David B. Weaver (Ed), *Encyclopedia of Ecotourism* (447-461). New York: CABI Publishing.
- Blamey, R.K. (2001). Principles of Ecotourism. In David B. Weaver (Ed), *Encyclopedia of Ecotourism.* (5-22). New York: CABI Publishing.
- Bookbinder, M., et al. (1998). Ecotourism's Support of Biodiversity Conservation. *Conservation Biology*, 12(6), 1399-1404.
- Brandon, K. (1996). *Ecotourism and Conservation: A Review of Key Issues*. Washington, DC: The World Bank.
- Buckley, R. (2001). Environmental Impacts. In David B. Weaver (Ed.), *The Encyclopedia of Ecotourism* (379-394). New York: CABI Publishing.
- Buckley, R. (2003). Case Studies in Ecotourism. Oxon, UK: CABI Publishing.
- Costa Rica Tourism Board (2002). Costa Rica Tourism Board website, accessed on March 23, 2004. Available: www.visitcostarica.com
- Epler Wood, M. (1993). Costa Rican Parks Threatened by Tourism Boom. *The Ecotourism Society Newsletter*. 3(1): p 1-2.
- Honey, M. (1999). Ecotourism and Sustainable Development. Who owns Paradise? Island Press, Washington D.C.
- International Ecotourism Society. International Ecotourism Society website, accessed on February, 26, 2004. Available: www.ecotourism.org
- Lindsey, Heather E. (2003). Ecotourism: Promise and Perils of Environmentally-Oriented Travel. *Cambridge Scientific Abstracts*. Hot Topics Series, February.
- Lindberg, K. (2001). Economic Impacts. In D. B. Weaver (Ed.), *Encyclopedia of Ecotourism* (363-378). New York: CABI International.

- Miller, K. and L. Tangley (1991). *Trees of Life: Saving Tropical Forests and Their Biological Wealth*. World Resources Institute, Washington D.C.
- Minca, C. and M. Linda. (2000). Ecotourism on the Edge: the Case of Corcovado National Park, Costa Rica. In X. Font and J. Tribe (Eds), *Forest Tourism and Recreation. Case studies in environmental management* (103-126).
- Orams, Mark B. (1995). Towards a more desirable form of ecotourism. *Tourism Management*. 16(1), 3-8.
- Our Common Future. (1987). World Commission on Environment and Development. Oxford: Oxford University Press
- Place, S. (1998). How sustainable is ecotourism in Costa Rica? In C. Michael Hall and Alan A. Lew (Eds), *Sustainable Tourism: A Geographic Perspective*, (107-118). New York: Addison Wesley Longman.
- Roberts, T. and N. D. Thanos. (2003). *Trouble in Paradise: Globalization and Environmental Crises in Latin America*. New York: Routledge.
- Ryan, C. (2002) Equity, management, power sharing and sustainability issues of the "new tourism". *Tourism Management*. 23(1), 17-26.
- Sirakaya, et al. (2001). Developing Indicators for Destination Sustainability. In David B. Weaver (Ed), *Encyclopedia of Ecotourism*. (411-432). New York: CABI Publishing.
- Smith, L. Michael (1995). Cost Rica's National Parks and Reserves. Accessed April 10, 2004. Available: http://www.cocori.com/map/mapnprs.htm
- Stem, et al. (2003). How "Eco" is Ecotourism? A Comparative Case Study of Ecotourism in Costa Rica. *Journal of Sustainable Tourism*, 11(4).
- Wall, Geoffrey. (1997) Is Ecotourism Sustainable? *Environmental Management*. 21(4), 483-491.
- Wearing, S. (2001). Exploring Socio-cultural Impacts on Local Communities. In David B. Weaver (Ed), *Encyclopedia of Ecotourism*. (395-410). New York: CABI Publishing.
- Weaver, D. B. (1999). Magnitude of Ecotourism in Costa Rica and Kenya. *Annals of Tourism Research*, 26(4), 792-816.
- Weaver, D. B. (1998). *Ecotourism in the Less Developed World*. New York: CABI International.

- Weaver, D. B. and R. Schluter. (2001). Latin America and the Caribbean. In David B. Weaver (Ed), *Encyclopedia of Ecotourism*. (173-188). New York: CABI Publishing.
- World Conservation Strategy. Developed in partnership by The World Conservation Union (IUCN), United Nations Environmental Programme (UNEP), World Wide Fund for Nature (WWF). (1991). World Conservation Union. Accessed on March 29, 2003. Available: http://www.gatewest.net/~green/from/l1.html
- Wunder, S. (2000). Ecotourism and economic incentives an empirical approach. Ecological Economics, 32, 465-479.
- Ziffer, K. (1989) Ecotourism: The Uneasy Alliance. Washington D.C., Conservation International.